

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
AUSTIN DIVISION**

RADIANT VISION SYSTEMS, LLC,

Plaintiff,

v.

ADMESY B.V.,

Defendant.

CIVIL ACTION NO. 21-1115-DAE

**RADIANT VISION SYSTEMS, LLC'S
OPENING CLAIM CONSTRUCTION BRIEF**

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I. INTRODUCTION

Patent claims should be interpreted as written, and generally are afforded their plain and ordinary meanings. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (*en banc*). Defendant Admesy B.V. asks the Court to redefine well-understood terms and rewrite the asserted claims by improperly incorporating limitations that are unsupported or factually and technically incorrect. Admesy's interpretations are tailored towards one goal: avoiding infringement. None of Admesy's proposed constructions are focused towards the true goal of claim construction: to "determin[e] the meaning and scope of the patent claims asserted to be infringed," (i.e., understanding the patents). *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), aff'd 517 U.S. 370 (1996).

The meaning of the terms at issue, in the context of the claims and specification, is straightforward and uncomplicated. The claims use plain English words (e.g., "filter," "wheel," and "assembly") that would be readily understood by skilled artisans and lay jurors alike. None of these terms requires construction to be understood, and Admesy's convoluted and unsupported constructions serve only to inject confusion.

For these reasons, as further discussed below, Radiant respectfully requests the Court reject Admesy's improper proposed constructions and apply the plain and ordinary meaning to the terms discussed below.

II. BACKGROUND

A. Radiant Vision Systems

Plaintiff Radiant Vision Systems, LLC ("Radiant") is an innovator in advanced imaging systems to critically evaluate light, color, manufacturing integrity, and

surface quality of illuminated displays and device assemblies. Its imaging systems help manufacturers of displays, lighting, assemblies, and other products ensure consistency and quality of their products. Radiant's innovations in design and engineering led to the issuance of the U.S. Patent 8,482,652 ("the '652 patent"), which relates to imaging devices, systems, and methods for collecting optical data.

B. Technology Background

A digital camera captures images by allowing light to enter through its lens and strike an image sensor (e.g., a charge-coupled device). Digital cameras often employ color filters to measure a general color distribution of light entering the digital camera through the lens. *See '652 patent at 3:41–43.* For example, a color filter can be positioned between the image sensor and the lens to filter certain wavelengths of light. *See id.* Once the light has been filtered, the image sensor can measure the intensity of wavelengths of light permitted to pass through the color filter. *See id.* Annotated Figure 1B illustrates light entering a camera lens, traveling down an optical or light path, and striking an image sensor. *See, e.g., id.* at Fig. 1B.

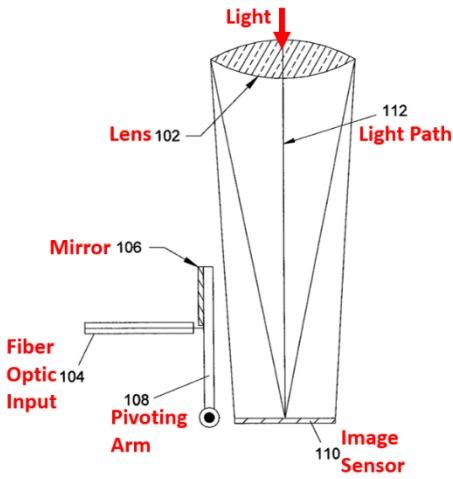


FIG. 1B
Prior Art

To ensure the accuracy of the color measurement, it is common to calibrate the digital camera. *Id.* at 1:27–30. When calibrating the digital camera, it is advantageous to measure and compare the exact same image with both the imaging sensor and a spectrometer to reduce the number of variables that can introduce errors

between the two measurements. *Id.* at 3:64–66. Given the limited space behind the camera lens, however, incorporating the necessary optical components for both the imaging sensor and spectrometer into the digital camera has proven to be a challenge. *Id.* at 4:2–6.

For example, Figure 3 illustrates the number of components that occupy the space between the lens and optical path, which include “one or more filter wheels 302 configured to hold multiple filters,” and “a shutter 306 . . . positioned within or proximate to this same area within the camera 300.” *Id.* at 4:21–30, Fig. 3. As such, there is generally “very limited space within the camera” between the lens and the image sensor. *Id.* at 4:30–32.

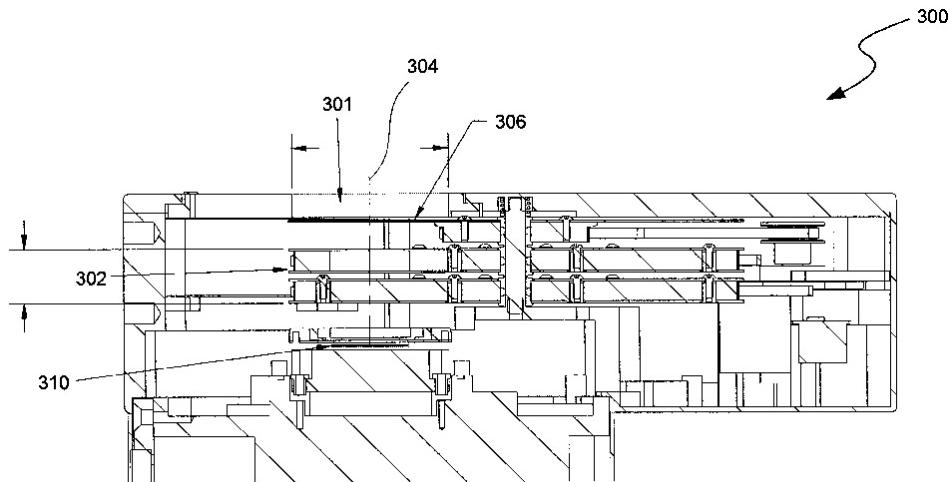


FIG. 3

C. The '652 Patent

Certain claims of the '652 patent address the above-referenced problem of fitting both optical components corresponding to an image sensor and optical components corresponding to a spectrometer in the limited space between the camera lens and the image sensor, allowing light that passes through the lens to be selectively

collected by the image sensor and an optical input for the spectrometer. *See id.* at 7:11–12.

For example, Figures. 4–6 of the '652 patent illustrate embodiments in which a filter wheel carries a reflector (e.g., a mirror) in a space typically reserved for a filter. *See, e.g., id.* at Figs. 4–6, 4:49–67. These configurations save space because the mirror and related components (e.g., a mirror support) are at least partially incorporated into a space that is typically shared with other filters already used by the camera. *See id.*

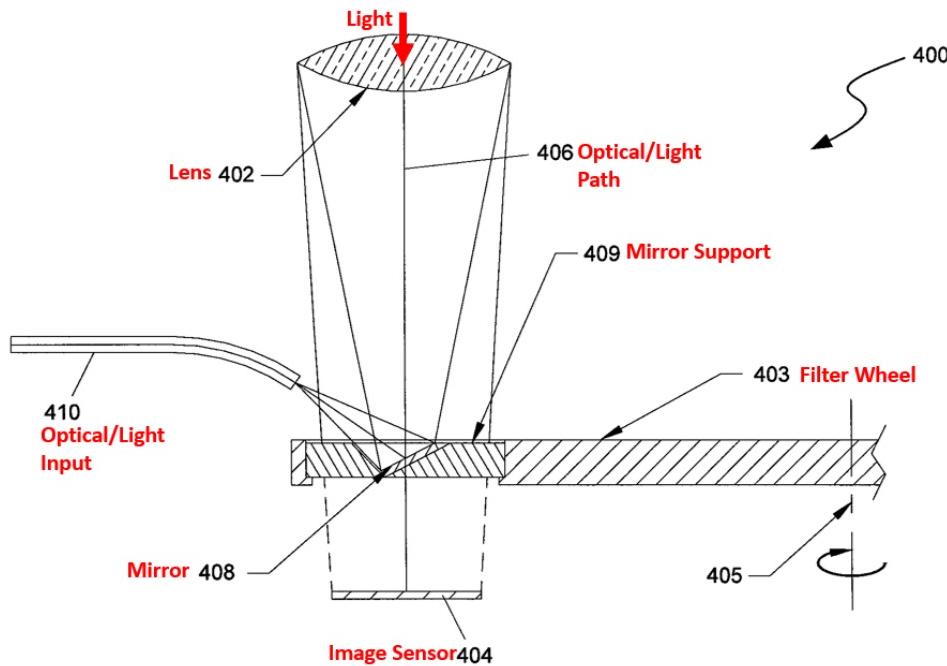


FIG. 4

Annotated Fig. 4

Referring, for example, to the embodiment illustrated in annotated Figure 4 above, the imaging device includes a “lens configured to introduce light into the imaging device along an optical path, and an image sensor spaced apart from the lens

and configured to receive at least a portion of the light along the optical path.” *Id.* at 2:64–67. The imaging device further includes a “filter assembly positioned between the lens and the image sensor, and a reflector or mirror carried by the filter assembly.” *Id.* at 3:1–3. The filter assembly includes a “filter wheel configured to rotate about a rotational axis that is generally parallel to the optical path” and is further configured to “move the reflector” in and out of the optical path. *Id.* at 8:62–9:5.

The ’652 patent further describes an embodiment that includes a plurality of reflectors/mirrors and a plurality of filter wheels. *See, e.g., id.* at Fig. 7A, 6:24–33. According to this embodiment, the imaging device is “configured to selectively redirect [] light collected by [a] lens [] to [a] spectrometer [] in addition to allowing light to pass from the lens [] to [an] imaging sensor.” *Id.* at 7:6–9. As such, the imaging device can operate in (i) a “picture taking mode” in which light passes from the lens to the imaging sensor, and (ii) a “light reflecting mode” in which light is reflected from the one or more reflectors to an optical input for a spectrometer. *See id.* at 7:13–19.

III. LEGAL STANDARDS

A. Claim terms are presumed to have their plain and ordinary meaning

“The purpose of claim construction is to ‘determine the meaning and scope of the patent claims asserted to be infringed.’” *O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quoting *Markman*, 52 F.3d at 976). “It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips*, 415 F.3d at 1312 (citation omitted). “[T]he words of a claim are generally given their ordinary and

customary meaning . . . [which is] the meaning that the term would have to a person of ordinary skill in the art . . . at the time of the invention . . . ” *Id.* at 1312–13 (internal citations and quotation marks omitted). Indeed, “[i]n some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Id.* at 1314. Terms that are neither unfamiliar or confusing to the jury, nor affected by the specification or prosecution history need no construction. *O2 Micro.,* 521 F.3d at 1360; *Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010).

“There are only two exceptions” in which claim terms are not given their full ordinary and customary meaning: “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.” *Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). Without clear and unambiguous disclaimer or lexicography, courts “do not import limitations into claims from examples or embodiments appearing only in a patent’s written description, even when a specification describes very specific embodiments of the invention or even describes only a single embodiment.” *JVW Enters., Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005).

B. The Court looks first to intrinsic evidence to determine claim meaning

To construe claims, courts look to, in order of deference, “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Phillips*, 415 F.3d. at 1314 (internal quotation marks and citation omitted). After considering the intrinsic evidence, “[e]xtrinsic evidence may also be considered, *if needed* to assist in determining the meaning or scope of technical terms in the claims.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed. Cir. 1996) (internal quotation marks and citation omitted). However, extrinsic evidence may only be relied upon when it does not contradict the intrinsic record consisting of the claims themselves, the specification, and the prosecution history. *Id.* at 1583. It is an error to rely on extrinsic evidence that contradicts the intrinsic record. See *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 790 F.3d 1329, 1338 (Fed. Cir. 2015).

IV. AGREED CLAIM TERMS

The parties have agreed on constructions of the following terms, for the sole purpose of this litigation.

Terms and Asserted Claims	Parties' Agreed Construction
“reflector” claims 1, 3, 4, 7, 13, 15, 18, 20, 23	“a surface capable of reflecting light”
“continuous surface mirror” claim 7	“a mirror with a non-segmented surface”

“optical input” claims 4, 5, 6, 13, 18, 19	“a structure that gathers light and directs it to another location.”
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V. DISPUTED CLAIM TERMS

A. “filter wheel”

Term and Asserted Claims	Admesy’s Proposal	Radiant’s Proposal
“filter wheel” claims 1, 2, 13, 18	“a frame or disk in the form of a circle configured to hold a filter”	plain and ordinary meaning

Admesy’s proposed construction is an attempt to improperly limit the claims to a non-definitional illustration of an embodiment. *See Cadence Pharms. Inc. v. Exela PharmaSci. Inc.*, 780 F.3d 1364, 1369 (Fed. Cir. 2015). Admesy’s proposal should be rejected because it seeks to redraft the claim language to require that the claimed filter wheel be “in the form of a circle” when the claims are not so limited.

The term “filter wheel” needs no construction as it would be readily understood by skilled artisans and lay jurors alike. The plain and ordinary meaning of a filter wheel is a wheel that is configured to hold one or more filters. There is no meaningful dispute over the “filter” modifier; Admesy agrees that a *filter* wheel is a wheel that is “configured to hold,” but need not necessarily contain, at least one filter. To the extent Admesy’s construction is intended to exclude filter wheels configured to hold multiple filters, it would impermissibly exclude embodiments described in the specification as “filter wheels 302 configured to hold multiple filters,” “a filter wheel 403 carrying one or more filters,” and “filter wheels 702 [that] are configured … to move various filters into the optical path 704.” ’652 patent at 4:21–22; 4:45–46; 6:16–18. A construction

that excludes embodiments would confuse the jury and cannot be correct. *See Vitron-ics*, 90 F.3d at 1583.

What remains is the “wheel” portion of the claim term, which is a plain-English, non-technical word that should not be unfamiliar or confusing to a jury. A “wheel” is a structure configured to rotate about an axis. And when read in the context of the claims and specification, the plain meaning of the term “filter wheel” is easily understood. For example, claim 1 of the ’652 patent recites “a filter wheel configured to rotate about a rotational axis that is generally parallel to the optical path,” and claim 2 states that “the filter wheel is configured to move the filter between filtering and non-filtering positions.” ’652 patent, 8:62–64; 9:7–9. There is nothing ambiguous about the plain language of “wheel,” or its use in the various claims that renders it ambiguous. Likewise, the specification refers to the filter wheel as configured to carry filters and rotate about a rotational axis. *See, e.g., id.* 4:45–48 (“The system 400 also includes a filter wheel 403 carrying one or more filters. The filter wheel 403 rotates about a rotational axis 405 that is generally parallel to the optical path 406.”); 6:16–18 (“The filter wheels 702 are configured to rotate about a corresponding rotational axis that is generally parallel to the optical path 704 to move various filters into the optical path 704.”). “The straightforward mechanical technology of the invention and the understandable claim language give [] meaning to this term.” *Kapusta v. Gale Corp.*, 155 F. App’x 518, 521 (Fed. Cir. 2005).

Admesy’s proposed construction improperly limits “filter wheel” to the “form of a circle.” But nothing in the ’652 patent claims, specification, or file history defines

the shape of the wheel or suggests any reason to limit the term to a specific shape. *See Kapusta*, 155 F. App'x at 521. The patent does not define the filter wheel as being circular in shape, the Patent Office never made a rejection that turned on the shape of the filter wheel, and the applicant never discussed the shape of the wheel, much less disavowed non-circular shapes. “[A]bsent contravening evidence from the specification or prosecution history, plain and unambiguous claim language controls the construction analysis.” *DSW, Inc. v. Shoe Pavilion, Inc.*, 537 F.3d 1342, 1347 (Fed. Cir. 2008), citing *N. Telecom Ltd. v. Samsung Elecs. Co.*, 215 F.3d 1281, 1295 (Fed. Cir. 2000) (“The plain and ordinary meaning of claim language controls, unless that meaning renders the claim unclear or is overcome by a special definition that appears in the intrinsic record with reasonable clarity and precision.”). And nothing in the patent’s description of the claimed filter wheel’s purpose or function (e.g., moving filters or reflectors in and out of an optical path) suggests the need for a circular form, as opposed to, for example, an elliptical, hexagonal, octagonal, Reuleaux triangle, star, rosette, portion of a circle, or other shape that can rotate. *See DSW*, 537 F.3d at 1347.

Admesy may attempt to support its proposed construction by pointing to an illustration in the patent in which a depicted embodiment includes a circular filter wheel. *See '652 patent*, Fig. 7B; 2:32–37 (“FIG. 7A is a schematic cross-sectional side view ... in accordance with yet another embodiment of the disclosure. FIG. 7B is a schematic wire frame top view of a portion of the camera of FIG. 7A”). That is plainly improper. The claims are not limited to an illustrated embodiment. *Id.*, 3:16–

23 (“Many of the details, dimensions, angles, and other features shown in the Figures are merely illustrative of particular embodiments of the disclosure.”); *see Cadence Pharms.*, 780 F.3d at 1369 (“[E]ven if all of the embodiments discussed in the patent included a specific limitation, it would not be proper to import from the patent’s written description limitations that are not found in the claims themselves”); *Phillips*, 415 F.3d at 1323 (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”); *Kapusta*, 155 Fed. App’x at 522 (“[A]lthough figures 4–7 show the instrument as housed in a rectangular-shaped case, the specification never suggests that this shape is critical to the operation of the invention. ... There is no reason why [the objective of the invention] could not be accomplished equally as well with a non-rectangular shaped case.”).

Accordingly, the Court should rule that “filter wheel” should be interpreted according to its plain and ordinary meaning.

B. “filter assembly”

Term and Asserted Claims	Admesy’s Proposal	Radiant’s Proposal
“filter assembly” claims 1, 10, 18, 20, 23	“a unit consisting of component parts, including at least one filter, that have been fitted together”	plain and ordinary meaning

Admesy’s proposed construction for “filter assembly” requires both “a unit ... [that] include[es] at least one filter” and parts that are “fitted together,” limitations that are not supported by the claims, specification, or file history.

Like “filter wheel,” the term “filter assembly” would be readily understood by skilled artisans and lay jurors and needs no construction. The plain and ordinary meaning of a filter assembly is a unit consisting of component parts that is configured to hold one or more filters. The parties agree, at least in part, that an “assembly” is “a unit consisting of component parts.” And at least with respect to its proposed construction of the term “filter wheel,” Admesy asserted that the “filter” modifier should mean that the claimed structure is “configured to hold,” but need not necessarily contain, at least one filter. Yet for the term “filter assembly,” Admesy pivots to a different and inconsistent proposed construction, presumably to manufacture a non-infringement position: Admesy would require that a filter assembly “includ[e] at least one filter,” when nothing in the patent or file history supports importing that additional limitation. Likewise, Admesy also seeks to import the requirement that the assembly’s component parts “have been fitted together,” even though the patent uses the term “assembly” to describe component parts that are decidedly *not* fitted together. Admesy’s proposed construction contradicts the plain meaning of “filter assembly” as well as the intrinsic record and should be rejected.

A filter assembly is a filter assembly whether or not it includes a filter, just like a water bottle need not hold water or a contact-lens case need not contain contact lenses for those labels to accurately describe those structures. Admesy’s proposed construction of “filter wheel” as a wheel “*configured to hold* a filter” recognizes this. Admesy cannot point to any intrinsic evidence that supports construing “filter assembly” differently to “*includ[e]* at least one filter.” The claims do not provide support.

For example, claim 1 describes a filter assembly “positioned between the lens and the image sensor, wherein the filter assembly comprises a filter wheel.” ’652 patent, 8:61–63. Admesy admits that a filter wheel need only to be configured to hold a filter; it does not need to actually carry a filter. *See supra* V.A. Claim 1 further describes “a reflector carried by the filter assembly, wherein the filter assembly is configured to move the reflector between first and second positions.” *Id.*, 8:65–67. The specification similarly describes that the filter assembly is “positioned between the lens and image sensor,” carries “a reflector or mirror,” and “is configured to move the reflector between the first and second positions.” *Id.*, 2:67–3:4. According to one embodiment, a mirror “is positioned in a mirror support 409 that is mounted on the filter wheel 403 in the space typically reserved for a filter.” *Id.*, 4:45–48. The patent does not suggest, much less require, that the claimed filter assembly include a filter.

Admesy’s proposed construction would also require that the assembly’s component parts “be[] fitted together.” But that construction adds an additional unclaimed limitation to the plain meaning of the term “assembly,” which “ordinarily means ‘a collection of parts so assembled as to form a complete machine, structure, or unit of a machine.’” *Kegel Co. v. AMF Bowling, Inc.*, 127 F.3d 1420, 1427 (Fed. Cir. 1997). It also directly contradicts the way the patent uses the term “assembly” to describe preferred embodiments. For example, the specification describes a “pickoff system or subassembly” that includes component parts such as reflector/mirrors, reflector/mirror supports, an adjustable reflector/mirror support, a reflector/mirror securing member or clamp, and a light pipe securing member or clamp. *See* ’652 patent at 6:19–63.

While some components of the light pickoff subassembly are described as being fitted together (e.g., the first reflector/mirror 730 is mounted on the first reflector/mirror support 732), other components of the light pickoff subassembly are *not fitted together* (e.g., the first reflector/mirror 730 and the corresponding first reflector/mirror support 732 are not fitted together with the second reflector/mirror 710 and the corresponding second reflector/mirror support 742, though these components work together to direct light to the light pipe 760). *See id.* at 6:36–43; 6:50–63; Figs. 7A–7B. Hence, “assembly,” as illustrated in the preferred embodiments of the ’652 patent, does not require “component parts . . . that have been *fitted together*.” Admesy’s construction excludes preferred embodiments, and a construction that excludes the preferred embodiments is “rarely, if ever, correct.” *See Vitronics*, 90 F.3d at 1583.

Admesy’s proposed construction is improper for the additional reason that it introduces ambiguity into otherwise clear and unambiguous claim language. For example, it is unclear whether Admesy’s “fitted together” requirement means that the component parts are touching, nested together, capable of being nested together, coupled, hinged, bonded, welded, or something else altogether. Admesy’s proposed construction provides no information on how to make this determination and adopting it would merely introduce ambiguity. Claim construction is intended to clarify the meaning of the claims, not obfuscate it. *See Liquid Dynamics Corp. v. Vaughan Co.*, 355 F.3d 1361, 1367 (Fed. Cir. 2004). Admesy’s attempt to inject this potential ambiguity into the claims should be rejected. *See Chimie v. PPG Indus. Inc.*, 402 F.3d 1371,

1377 (Fed. Cir. 2005) (“Courts construe claim terms in order to assign a fixed, unambiguous, legally operative meaning to the claim.”).

A clear disavowal is necessary to incorporate numerous limitations to a simple term such as filter assembly to narrow it in the manner Admesy proposes. *See 3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013) (“[w]here ... a disavowal does not exist, the ordinary and customary meaning of the claim term will be given its full effect”). Admesy can point to no such disavowal; thus, no construction is required here.

VI. CONCLUSION

For the foregoing reasons, Radiant respectfully requests that the Court reject Admesy’s improper proposed constructions and apply the plain and ordinary meaning to the disputed claim terms.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above and foregoing document has been served January 20, 2023 to all counsel of record, via the Court's CM/ECF system.

/s/ Theresa H. Nguyen

Theresa H. Nguyen